

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : Sven Mardh  
SERIAL NO. : Unassigned EXAMINER : Unassigned  
FILED : August 10, 2001 ART UNIT : Unassigned  
FOR : RECOMBINANT PHAGES

**VIA EXPRESS MAIL NO. EL806482550US**  
**DATE OF DEPOSIT: August 10, 2001**

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

Sir:

Please amend the claims as follows, prior to calculating the filing fees due:

IN THE CLAIMS:

Please amend claims 4-8, 10, and 12-14 as follows:

4 (amended). A bacteriophage as claimed in claim 1 which is a modified filamentous bacteriophage.

5 (amended). A bacteriophage as claimed in claim 1 which is a modified M13 bacteriophage.

6 (amended). A bacteriophage as claimed in claim 1 wherein said first component of said recombinant protein is derived from the protein responsible for adsorption of the unmodified form of said bacteriophage to bacterial pili.

7 (amended). A bacteriophage as claimed in claim 1 wherein said second component of said recombinant protein comprises a ScFv polypeptide.

8 (amended). A bacteriophage as claimed in claim 1 which is a modified M13 bacteriophage wherein said first component of said recombinant protein is derived from the g3p protein.

10 (amended). A bacteriophage of claim 1 for use in the treatment or prophylaxis of *Helicobacter pylori* infection wherein the antibody variable region sequences of said recombinant polypeptide are variable region sequences of a monoclonal antibody selected from the monoclonal antibodies of hybridoma cell lines 5F8 (ECACC No.95121524), 2H6 (ECACC No. 95121526) and 5D8 (ECACC No.95121527).

12 (amended). A pharmaceutical composition comprising a bacteriophage as claimed in claim 1 in admixture with a pharmaceutically acceptable carrier or excipient.

13 (amended). A method for treatment of a bacterial infection in a mammal which comprises administering a bacteriophage of claim 1 to said mammal.

14 (amended). Use of a bacteriophage as claimed in claim 1 in the manufacture of a medicament for the treatment or prophylaxis of a mucosal bacterial infection.

#### REMARKS

Claims 1-16 are pending and under consideration. Claims 4-8, 10, and 12-14 have been amended to remove multiple dependencies. No issue of new matter is raised.

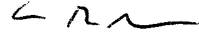
Please enter this amendment before calculation of filing fees.

Attached hereto is a page captioned "Version with markings to show changes made", which shows the amended claims with additions underlined and deletions bracketed.

No additional fee is believed to be necessitated by the foregoing amendments. However, should this be erroneous, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment, or credit any overages.

Applicants respectfully request entry of the foregoing amendments. Early and favorable action on the pending set of claims is earnestly solicited.

Respectfully submitted,



Catherine Roseman Smith  
Attorney for Applicant(s)  
Registration No. 34,240

KLAUBER & JACKSON  
411 Hackensack Avenue  
Hackensack, New Jersey 07601  
(201) 487-5800  
Date: August 10, 2001

**Version with Markings to show Changes Made**

Please amend the claims by adding underlined material and deleting bracketed material as follows:

4 (amended). A bacteriophage as claimed in [any one of claims 1 to 3] claim 1 which is a modified filamentous bacteriophage.

5 (amended). A bacteriophage as claimed in [any one of claims 1 to 4] claim 1 which is a modified M13 bacteriophage.

6 (amended). A bacteriophage as claimed in [any one of claims 1 to 5] claim 1 wherein said first component of said recombinant protein is derived from the protein responsible for adsorption of the unmodified form of said bacteriophage to bacterial pili.

7 (amended). A bacteriophage as claimed in [any one of claims 1 to 6] claim 1 wherein said second component of said recombinant protein comprises a ScFv polypeptide.

8 (amended). A bacteriophage as claimed in [any one of claims 1 to 7] which is a modified M13 bacteriophage wherein said first component of said recombinant protein is derived from the g3p protein.

10 (amended). A bacteriophage as claimed in [any one of claims 1 to 9] claim 1 for use in the treatment or prophylaxis of Helicobacter pylori infection wherein the antibody variable region sequences of said recombinant polypeptide are variable region sequences of a monoclonal antibody selected from the monoclonal antibodies of hybridoma cell lines 5F8 (ECACC No.95121524), 2H6 (ECACC No. 95121526) and 5D8 (ECACC No.95121527).

12 (amended). A pharmaceutical composition comprising a bacteriophage as claimed in [any one of the preceding claims] claim 1 in admixture with a pharmaceutically acceptable carrier or excipient.

13 (amended). A method for treatment of a bacterial infection in a mammal which comprises administering a bacteriophage of claim 1 to said mammal [or pharmaceutical composition according to any one of the preceding claims].

14 (amended). Use of a bacteriophage as claimed in [any one of claims 1 to 11] claim 1 in the manufacture of a medicament for the treatment or prophylaxis of a mucosal bacterial infection.